

IN THE CLAIMS

1. (original) A circular pole piece included in a magnetic circuit for magnetic resonance imaging (MRI), wherein laminate blocks each of which has hexagonal soft magnetic material tiles layered are arranged so that the blocks will have a substantially circular shape as a whole.
2. (original) A circular pole piece according to Claim 1, wherein said laminate block has hexagonal directional magnetic steel sheet tiles, which are identical to one another, layered with the directions of the axes of easy magnetization thereof varied by 60° so that the tiles will exhibit a non-directional property as a whole.
3. (original) A circular pole piece according to Claim 1, wherein said laminate block has hexagonal directional magnetic steel sheet tiles, which are identical to one another, layered with the directions of the axes of easy magnetization thereof varied by 60° so that the tiles will exhibit a non-directional property as a whole, and has a non-directional magnetic steel sheet tile, which is devoid of an axis of easy magnetization, layered in combination with the directional magnetic steel sheet tiles.
4. (original) A circular pole piece according to Claim 1, wherein said laminate block has non-directional magnetic steel sheet tiles, which are devoid of an axis of easy magnetization, layered.
5. (original) A circular pole piece according to Claim 1, wherein one side of said soft magnetic material tile is approximately 2.5 cm or less in length.
6. (currently amended) A laminate block manufacturing method comprising the steps of:

hexagonally cutting a directional magnetic steel sheet, which has an axis of easy magnetization, using a die so as to produce directional magnetic steel sheet tiles of a pole piece;

layering ~~a plurality of~~ the directional magnetic steel sheet tiles with the axes of easy magnetization thereof turned by 60° so that the tiles will exhibit a non-directional property as a whole; and

integrating the tiles using an adhesive, through caulking, or using a rivet or screw.

7. (currently amended) A laminate block manufacturing method comprising the steps of:

hexagonally cutting a directional magnetic steel sheet, which has an axis of easy magnetization, using a die so as to produce directional magnetic steel sheet tiles of a pole piece;

hexagonally cutting a non-directional magnetic steel sheet, which is devoid of an axis of easy magnetization, using a die so as to produce non-directional magnetic steel sheet tiles of the pole piece;

layering ~~a plurality of~~ the directional magnetic steel sheet tiles with the axes of easy magnetization thereof turned by 60° so that the directional magnetic steel sheet tiles will exhibit a non-directional property as a whole, and layering at least one of the non-directional magnetic steel sheet tiles in combination with the directional magnetic steel tiles; and

integrating the directional magnetic steel sheet tiles and at least one of the non-directional magnetic steel sheet tiles using an adhesive, through caulking, or using a rivet or screw.

8. (currently amended) A laminate block manufacturing method comprising the steps of:

hexagonally cutting a non-directional magnetic steel sheet devoid of an axis of easy magnetization using a die so as to produce non-directional magnetic steel sheet tiles of a pole piece;

layering ~~a plurality of~~ the non-directional magnetic steel sheet tiles; and

integrating the tiles using an adhesive, through caulking, or using a rivet or screw.

9. (previously presented) An MRI system comprising:
 - a circular pole piece comprising a plurality of laminate blocks arranged so that the laminate blocks will have a substantially circular shape as a whole, and wherein each laminate block comprises a plurality of hexagonal soft magnetic material tiles.
10. (new) A circular pole piece according to Claim 1 wherein the circular pole piece is different from a permanent magnet.
11. (new) A circular pole piece according to Claim 1 wherein the circular pole piece is different from a permanent magnet of a magnetic resonance imaging system implementing the magnetic resonance imaging.